

Appl. No. 10/719,971
Response Dated March 27, 2006
Reply to Office action of January 30, 2006

132669-1

REMARKS

Claims 1-13 and 15-26 are pending in the above-identified patent application. Claims 1 and 15 have been amended and claim 14 has been canceled solely for the purpose of furthering the prosecution of the instant patent application. Claims 1-26 have been rejected.

On March 3, 2006, applicant's counsel and Examiner conducted an Examiner's interview, in which the Mansky reference was discussed relative to the pending claims. The Examiner suggested the addition of greater structure to the claim element "sensing layer" to clearly distinguish between the recited claims and the thin film sample 90 of Mansky. Applicant has complied with the Examiner's suggestion.

Claims 1-8, 10-14, 17-22, 24 and 25 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Mansky (US 2003/0101006). Claim 14 has been canceled and thus the rejection is moot as to that claim. Applicant respectfully traverses the rejection as it applies to claims 1-8, 10-13, 17-22, 24 and 25.

Claim 1, from which claims 2-8, 10-13, 17-22, 24 and 25 depend, recites a miniaturized sensor device that includes, among other things, "a sensing layer disposed directly or indirectly adjacent to the thin film membrane". The Office action indicates that Mansky discloses "a thin film sensing layer [90]". Applicant respectfully submits that the sensing layer 90 is mischaracterized, and that it is in reality a sample to be analyzed. Nonetheless, to provide greater clarity as to the claim scope being sought, and in response to telephonic discussions with the Examiner on March 3, 2006, applicant has amended claim 1 to recite "a sensing layer disposed directly or indirectly adjacent to the thin film membrane, said sensing layer comprising a plurality of nano-scale particles and a plurality of nanopores, wherein said sensing layer serves as an interface between the sensor device and a substance being sensed" (emphasis provided to denote added text). Applicant submits that the additional structural features provided in claim 1 with regard to the sensing layer clearly distinguishes the claimed sensor device from the sensor device described in Mansky.

Claims 9 and 23 stand rejected under 35 U.S.C. § 103 as being unpatentable over Mansky. Applicant respectfully traverses the rejection.

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Claims 9 and 23 depend from claim 1. For at least the reasons provided above, applicant submits that Mansky fails to teach each and every element of the recited invention. Specifically, Mansky fails to teach or suggest "a sensing layer disposed directly or indirectly adjacent to the thin film membrane, said sensing layer comprising a plurality of nano-scale particles and a plurality of nanopores, wherein said sensing layer serves as an interface between the sensor device and a substance being sensed."

Claim 15 stands rejected under 35 U.S.C. § 103 as being unpatentable over Mansky in view of Routkevitch. Applicant respectfully traverses the rejection.

Claim 15 depends from claim 1, and the arguments posed above regarding claim 1 patentability over Mansky are equally applicable to this rejection. Routkevitch is relied upon in the Office action as teaching the use of nanotubes as sensor elements in a sensor array system. Routkevitch provides no meaningful teaching or suggestion regarding "a sensing layer disposed directly or indirectly adjacent to the thin film membrane, said sensing layer comprising a plurality of nano-scale particles and a plurality of nanopores, wherein said sensing layer serves as an interface between the sensor device and a substance being sensed." Thus, applicant respectfully submits that claim 15 is patentable over these cited references.

Claim 16 stands rejected under 35 U.S.C. § 103 as being unpatentable over Mansky in view of Zanini-Fisher. Applicant respectfully traverses the rejection.

Claim 16 depends from claim 1, and the arguments posed above regarding claim 1 patentability over Mansky are equally applicable to this rejection. Zanini-Fisher is relied upon in the Office action as teaching the use of aluminosilicates as sensor elements in a sensor array system. Zanini-Fisher provides no meaningful teaching or suggestion regarding "a sensing layer disposed directly or indirectly adjacent to the thin film membrane, said sensing layer comprising a plurality of nano-scale particles and a plurality of nanopores, wherein said sensing layer serves as an interface between the sensor device and a substance being sensed." Thus, applicant respectfully submits that claim 16 is patentable over these cited references.

Claim 26 stands rejected under 35 U.S.C. § 103 as being unpatentable over Mansky in view of DiMeo. Applicant respectfully traverses the rejection.

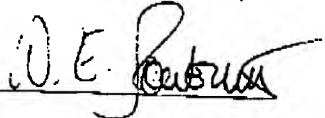
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Claim 26 depends from claim 1, and the arguments posed above regarding claim 1 patentability over Mansky are equally applicable to this rejection. DiMeo is relied upon in the Office action as teaching the use of dry air for calibrating and flushing a sensor array system. DiMeo provides no meaningful teaching or suggestion regarding "a sensing layer disposed directly or indirectly adjacent to the thin film membrane, said sensing layer comprising a plurality of nano-scale particles and a plurality of nanopores, wherein said sensing layer serves as an interface between the sensor device and a substance being sensed." Thus, applicant respectfully submits that claim 26 is patentable over these cited references.

For at least the aforementioned reasons, applicant respectfully requests withdrawal of the outstanding rejections and allowance of claims 1-13 and 15-26. Should the Examiner believe that anything further is needed to place the application in even better condition for allowance, the Examiner is requested to contact applicant's undersigned representative at the telephone number below.

Respectfully submitted,

By 

William Powell
Reg. No. 39,803
General Electric Company
Building K1, Room 3A68
Schenectady, New York 12301
Telephone: (518) 387-4530